

Claims

1. A blade assembly, especially for an ice auger or the like, comprising a shank (1) and a bit head (2), the shank (1) being provided at least with elements (3) for mounting the bit head (2), and the bit head (2) including one or more disk-shaped bit members (2a), which rotate (w) during a drilling/boring operation and which have an outer rim (2a') thereof working as an actual cutting face in drilling/boring, **characterized** in that the rotary bit member (2a) included in the bit head is disposed at an angle (a) of less than  $45^\circ$  relative to a drilled surface (A).
2. A blade assembly as set forth in claim 1, its shank (1) comprising a structure, which projects in two or more directions and which has the bit members (2a) included in the bit head (2) mounted on its arm elements in a dismountable fashion, such as by using a screw connection or the like, **characterized** in that arm elements (1a), projecting laterally from the shank (1) in a substantially horizontal plane, are shaped such that the angle (a) of each bit member (2a), such as its inclination angle (a1), incidence/cutting angle (a2) and/or the like, lies within the range of  $5-30^\circ$  relative to the drilled surface (A).
3. A blade assembly as set forth in claim 1 or 2, **characterized** in that one or more bit members (2a) included in the bit head (2) are provided with means (4) for enhancing the drilling action, such as a corrugation, a serration and/or the like, present on its cutting face (2a').
4. A blade assembly as set forth in claim 1, **characterized** in that the bit head (2) comprises a

pilot-hole boring central drill, such as a twist bit (CD) or the like, which is coupled to the blade assembly's shank (1), and the rotary bit member (2a), which is disposed on at least one arm element (1a) coupled to the shank (1) and  
5 which drills the outer edge for a hole to be bored/drilled.

5. A blade assembly as set forth in any of preceding claims 1-4, **characterized** in that the bit member (2a) included in the bit head (2) has an inclination angle (a;  
10 a1) of  $14,5^\circ$  and/or an incidence/cutting angle (a; a2) of  $15^\circ$ .

6. A blade assembly as set forth in any of preceding claims 1-5, **characterized** in that its shank (1) is provided  
15 with means (5) for adjusting the distance of one or more bit members (2a) with respect to a centre axis (k) of the shank (1).

7. A blade assembly as set forth in claim 6,  
20 **characterized** in that the means (5) for adjusting the distance of one or more bit members (2a) are established by means of an elongated attachment hole (3a) or the like present in the shank (1), such as in one or more of its arm elements (1a, 1a").

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8. A blade assembly as set forth in any of preceding claims 1-7, **characterized** in that one or more bit members (2a) included in the bit head (2) are adapted to have a flexible attachment to the shank (1), specifically for  
30 enabling self-adjustment of its cutting angle (a; a2).

9. A blade assembly as set forth in any of preceding claims 1-8, **characterized** in that the bit member (2a) included in the bit head (2) is manufactured in 1,5-3,5 mm

gauge sheet steel, which is formed with the cutting face (2a') and/or the means (4) for enhanced drilling by die cutting or the like manner.

- 5 10. A blade assembly (v) as set forth in claim 9, **characterized** in that a bevel establishing the bit member's cutting face (2a') is surface ground to an angle (c) of 25°.